

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently amended): An impeller having a disk-like main plate, a blade joined to said main plate, and a side plate having a suction port, characterized in that:

a boss hole is formed in a central portion of said main plate for attaching a boss which engages with a pump shaft to said boss hole,

wherein a the step portion is formed around the boss hole, which is formed in said main plate by drawing, said step portion constituting means for forming a gap so that when a plurality of main plates are piled on one another, said gap is formed by only contacting said step portions of adjacent main plates to each other to thereby prevent said adjacent main plates from being adhered to each other,

wherein the step portion comprises a sharp angle on a surface of the main plate and a slant portion on an opposite surface of the main plate.

2. (Previously presented): The impeller as recited in claim 1, characterized in that when said gap is set to be in a rage of 0.3 mm to 0.4 mm.

3. (Currently amended): An impeller having a disk-like main plate, a blade joined to said main plate, and a side plate having a suction port, characterized in that:

a boss hole is formed in a central portion of said main plate for attaching a boss which engages with a pump shaft to said boss hole,

wherein a step portion is formed around the boss hole, which is formed in said main plate by drawing, said step portion constituting means for forming a gap so that when a plurality of main plates are piled on one another, said gap is formed by only contacting said step portions of adjacent main plates to each other to thereby prevent said adjacent main plates from being adhered to each other;

wherein the step portion comprises a sharp angle on a surface of the main plate and a slant portion on an opposite surface of the main plate; and

a radially inner end portion of said blade which is joined to said main plate is rounded near a portion at which said blade is joined to said main plate.

4. (Previously presented): A multistage pump characterized by comprising a plurality of intermediate casings, impellers, as recited in claim 1, housed in respective intermediate casings, and a main shaft for supporting said impellers.

5. (Previously presented): A multistage pump characterized by comprising a plurality of intermediate casings, impellers, as recited in claim 2, housed in respective intermediate casings, and a main shaft for supporting said impellers.

6. (Previously presented): A multistage pump characterized by comprising a plurality of intermediate casings, impellers, as recited in claim 3, housed in respective intermediate casings, and a main shaft for supporting said impellers.

Amendment Under 37 C.F.R. §1.111
Application No. 10/501,886
Attorney Docket No. 042599

7. (Previously presented): The impeller having a disk-like main plate according to claim 1, wherein the main plate is a single piece of molded metal.

8. (Previously presented): The impeller having a disk-like main plate according to claim 3, wherein the main plate is a single piece of molded metal.